

COMP2332 – Project/Assignment-2: AS-IS and TO-BE BPMN Models

Project (Assignment -2)

Aim: Conduct Business Process Analysis and Produce AS-IS and TO-BE BPMN Models

Deadline: Saturday 12th Dec 2020.

Presentations: Tuesday 15th and Thursday 17th Dec.

As discussed, building on the work you have done in the first assignment, each group is required to undertake the following tasks:

1. Draw an BPMN diagram/model of the healthcare's organisation case study you have described in assignment 1. This should produce an AS-IS model, of the current processes and activities of your case study.
2. Using both EPC model (from assignment-1) and the drawn BPMN AS-IS model, conduct a business process analysis of the case you have studied and described in assignment 1. Look for and Identify the following issues:
 - 2.1. Primary (core) activities, support and management activities.
 - 2.2. Out of these processes and activities, identify business process inefficiencies in the primary activities, and possible errors or unnecessary support activities, and if any inefficiencies in management activities.
 - 2.3. For identified inefficiencies in the processes, conduct root-cause analysis, i.e. identify actual root causes, causing inefficiencies in activities.
 - 2.4. Analyse the AS-IS model, further by identifying its bottlenecks using what-if scenarios, on scaling up the input for processes (scalability of the model, e.g. if normal number of patients is 10, what-if it becomes 50). Develop and consider at least 3 what-if scenarios.
3. Based on your business process analysis, produce a new "TO-BE" model, as a BPMN model/diagram, that addresses the above inefficiencies, to reach optimal outcome on the three BP key objectives: Quality, Time and Cost. For this, identify clearly:
 - 3.1. the proposed "TO-BE" model, showing the changed activities, the new proposed activities, and the new proposed business process flows.
 - 3.2. Describe how the new TO-BE model addresses the identified inefficiencies, in step 2 above.
 - 3.3. Analyse the "TO-BE" model, using the scalability of the model testing using what-if scenarios, use the same scenarios you have used above in step 2.4.

Presentations Format: Each group is required to present their completed project work, from Assignment 1 and Assignment 2. The presentation should include:

- Description of the studied healthcare case
- The EPC/ARIS model - from Assignment 1 (diagram only)
- The AS-IS BPMN model
- Analysis of the AS-IS

- Proposed changes to the AS-IS model: including resolved problems or made improvements
- To-BE BPMN, showing the resolved and made process improvements.

Presentations: presentations will be on Tuesday 15th and 17th Dec 2020, during the lecture, as follows.

- Tuesday 15th Dec: G1, G2, G3, G4 and G5
- Thursday 17th Dec: G6, G7, G8, and G9

Each group will be given **12 min** to present their work + **3 min** questions

Submission: Please submit your complete project written report as a **single PDF file**, in reply to this message, on Ritaj, on the above deadline, clearly noting your Group-No and group details. (make sure to include your group number in the email title, e.g. G1-Comp2332-Final Project Report)

The submitted report, should be formatted according the Report format below. However, as a general guideline, in terms of length or size, is expected to include the following items.

- 1-2 pages: AS-IS BPMN model
- 1-2 pages: business process, critical, analysis of the AS-IS model
- 1-2 pages: proposed changes to the AS-IS model based on the analysis.
- 1-2 pages: TO-BE BPMN model.

Project Report Format: You are required to submit your project report in the following format:

1. Chapter 1: Project Planning and Management

Include in this chapter:

- 1.1. Group Name: Group Number e.g. G1
- 1.2. Name of students/members: list of names and the university numbers of members of the group.
- 1.3. Role of each member: e.g. project manager, secretary, business analyst/modeller, BP model designer
- 1.4. Project management strategy: how the team have been conducting its meetings, how often the team has been meeting, how the team has been making their decisions (e.g. project manager makes final decision, or by voting etc.)
- 1.5. Project manager report: a project manager must write one page stating:
 - 1.5.1. the work done by each group member
 - 1.5.2. the barriers or challenges faced in managing the project, and
 - 1.5.3. his/her opinion on how s/he evaluates the success of their project.
- 1.6. Group members report: in one page, each group member must write
 - 1.6.1. his/her opinion on how s/he evaluates the success of their project.
 - 1.6.2. a list of the tasks s/he has done, drawn or contributed to the project work (for example, visited and studied the case study clinic or hospital, contributed to drawing AS-IS BPMN model, analysing AS-IS BPMN

model, discussing AS-IS BPMN model, reviewing TO-BE BPMN model etc.).

2. Chapter 2- Case Study: Description

Include in this chapter:

- 2.1. The description of your case study, from your assignment-1. [you can update or expand it if you have learned more details about your case study]
- 2.2. EPC Model – from assignment-1.

You can improve your previously submitted description of your case study and the EPC model for this final submission.

3. Chapter 3- Case Study: AS-IS BPMN and Business Process Analysis

Include in this chapter:

- 3.1. The AS-IS BPMN model
- 3.2. The business process analysis of the AS-IS model. As described previously, it should identify and describe the following:
 - 3.2.1. The identified Primary (core) activities, support and management activities.
 - 3.2.2. Out of these processes and activities, identify business process inefficiencies in the primary activities, and possible inefficiencies, errors or unnecessary support activities, and if any inefficiencies in management activities.
 - 3.2.3. For identified inefficiencies in the processes, conduct root-cause analysis, i.e. identify actual root causes, causing inefficiencies in activities.
 - 3.2.4. Analyse the AS-IS model, further by identifying its bottlenecks using what-if scenarios, on scaling up the input for processes (scalability of the model, e.g. if the usual number of daily patients is 10, what –if it becomes 50, will still the AS-IS model scale/work?).

4. Chapter 4- Case Study: TO-BE BPMN Model

Include in this chapter:

- 4.1. The proposed changes, improvements to the AS-IS model based on your above analysis. [Based on the analysis conducted in step 3.4, identify what improvements could be made to the AS-IS model, to develop a TO-BE model]
- 4.2. The developed “TO-BE” model. The “TO-BE” BPMN model, which addresses the above proposed changes and inefficiencies, to reach optimal outcome on the three BP key objectives: Quality, Time and Cost. In this, identify clearly:
 - 4.2.1. the proposed “TO-BE” model, showing the changed activities, the new proposed activities, and the new proposed business process flows.
 - 4.2.2. Describe how the new TO-BE model addresses the identified inefficiencies, in step 2 above.
 - 4.2.3. Analyse the “TO-BE” model, using the scalability of the model testing using what-if scenarios, using the same scenarios you have used above in step 3.2.4. in chapter 3.